

Introduction

This issue of Environmental Health Perspectives consists of papers presented on June 5 and 6, 1978 at a conference on Pollutants and High Risk Groups which was conducted by the Division of Public Health of the University of Massachusetts, Amherst, Massachusetts, and sponsored by the Environmental Protection Agency.

The conference rationale was based on the recognition that one of the most pressing issues in the area of environmental and occupational health concerns the identification and quantification of individuals at high risk to the development of toxic and/or carcinogenic responses following exposure to toxic substances. High risk groups are the first to experience morbidity and mortality as a result of exposure to a wide range of commonly encountered pollutants. Since a primary goal of environmental/occupational health policies is to protect all individuals from adverse health effects, it is necessary to analyze more closely the concept of increased risk. Thus, the conference participants presented evidence which identified specific biological factors which predispose individuals to adverse health effects. Those specific biological factors which are considered in detail included developmental processes, genetic factors, nutritional status, pre-existing disease conditions, and to some extent, personal habits and life style.

In addition to biomedical research on high risk groups, the conference devoted considerable time toward elucidating the role that the knowledge of high risk groups should have in occupational health policies and practices as well as standard setting in the United States. The conference provided a framework whereby different interest groups such

as industrial management, labor unions, and government regulatory agencies such as the Occupational Health and Safety Administration had the opportunity to present their view points.

The precise mechanistic explanation of differential susceptibility to toxic and/or carcinogenic agents is known for only a few agents and predisposing conditions. This is why it is difficult to truly evaluate the role of high risk groups knowledge in policy matters. Future explanations may hopefully further clarify why certain individuals may be predisposed to developing environmentally induced cancers while others are not. How this knowledge should affect occupational health standards, job placement, workmen's compensation, management-labor relationships, etc., is difficult to define. However, the general consensus in my opinion was: (1) that industries must remain competitive; (2) that industrial management and labor must work together in solving health and economic issues; (3) that industry must adopt a strong effort to reduce the level of stressor agents in the environment; (4) that if high risk workers can not be protected and strict standards are not possible, then a job placement with similar salary and benefits should be considered; (5) that a screening out of hypersusceptibles program should not encourage a diminished concern for the health and safety of the so-called nonsusceptibles.

EDWARD J. CALABRESE
UNIVERSITY OF MASSACHUSETTS
AMHERST, MASSACHUSETTS
Guest Editor